



*"Doctrine provides a military organization with a common philosophy, a common language, a common purpose, and a unity of effort."*

*(General George H. Decker, USA)*

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## **OVERVIEW OF AN SUPPORTED SCIENTIFIC RESEARCH BY HUNGARIAN SCIENTIFIC RESEARCH FUND: EVOLUTION OF THEORY AND PRACTICE OF UNIVERSAL AND HUNGARIAN AERIAL WARFARE**

### **INTRODUCTION**

In this year the authors got support from the Hungarian Scientific Research Fund to make some researches related to evolution of theory and practice of universal and Hungarian aerial warfare. This article gives overview about research plan, aims and planned methods as well as probable results.

### **1. THE INTERNATIONAL<sup>i</sup> AND DOMESTIC<sup>ii</sup> ANTECEDENTS OF THE TOPIC**

With the successful flying experiments (Zeppelins, engines flying) new perspectives were opened for the theory of the warfare and its practice. The researches being aimed at the exploration of the airforce's and the aerial warfare's essence are continuous since the beginnings of the flyings with a military aim.

From the airforces' role and the significance of the aerial warfare continued debates yielded the development of different theories and concepts being effective until today.

Four mentalities characterize the theories analysing the role of the aerial warfare during the times. Summing up the theories:

1. The airforce primarily with a strategic character and significance strength. He plays a deciding role regarding the denouement of the wars and because of this fits as uniform superior service into the armed forces' system.
2. The airforce is equal with the rest of the military force's components. It may execute the support of surface services executing the capital task acting independently from time to time in the interest of the successful operations.

3. The airforce fundamentally onto the support of the surface forces gets organized and his activity forms his integral part they his operations.
4. The airforce in terms of the denouement of the war with strategic significance, but the other one may support the operations of two military services in the given periods of the war. The aerial campaigns or operations incorporable with the surface operations without harmful interferences, indeed efficiency enhancing synergy is caused in an ideal case.

Summing up the international literatures the undermentioned more capital inferences can be formulated:

1. Primarily from a military history outlook they aim for the analysis of the events.
2. Relatively few writings deal with the evolution of the theory of the air forces' application.

Analysing the domestic researches, literatures and operation applications easily reasonable, that the Hungarian military leadership paid attention emphasized always to the theoretical examination of armed fight and his practical realisation in the air. The airplanes and the air defence artillery devices, and the watcher and reporting services appeared in a monarchy's armed forces soon.

Between the two world wars - despite the bindings of the treaty of Trianon - neither the airforce closed down in our homeland and the development of the host systems being attached to him tightly and the examination of his theory of application.

Vitéz Szentnémedy Ferenc, László Frigyes, Komposcht Nándor, Tóth Elemér and then the active activity of many other military specialists (in the practice just some, than on Magyar Katonai Közlöny, Magyar Katonai Szemlék columns, and in other military and civil publications) represented this well in the period marked.

Under the World War two, the Hungarian forces working as a modern military airforce rather continually, they were capable - one measured against their strength - onto the activity with an expected level.

From the period more excellent one, subfields examining and hypotenuse character studies, dissertations, books appeared already. We have to mention it inevitably Szabó Miklós an academician's creations the Hungarian flying powers', Barcy Zoltán and Varga József works in the air defence artillery's concern.

Comprehensive creation in which the work analysing all of the components of the air forces in unity we may not find.

The topic of the research, than generally the issue of the military flying and the aerial warfare popular and like this, than numberless literature which can be seen based on that short summary and research can be bound.

Verifiable, that because of the beginnings the aerial warfare of our days summing, the most important trends and tendencies, and the studies contemplating the different notions of the different military cultures in unity cannot be found.

It is the novelty of our research that the universal aerial warfare ideas and the Hungarian official ideas examine the system of a context. We analyse the relation of the Hungarian theories and the practice besides to the prevailing trends.

## 2. PRELIMINARY RESEARCHES

In the applied topic the basis of the research work for the theory of the aerial warfare, and to the evolution of its practice, and our researches until now being attached to the inner content of the air operations, the peculiarities of his planning constitute it. The results of our works in scientific journals, we revealed it to the vocational public opinion concerned on scientific applications continuously.

Our judgement, the preliminary researches which can be bound to the applied topic tightly lay the foundations for the additional research work duly, and as a final goal the publishing of a comprehensive study.

## 3. THE METHOD OF THE PLANNED RESEARCH AND ITS SCHEDULE

In the focus of our researches the airforce operational theory is at a standstill.

It within:

- The content elements of the military doctrine and the doctrine development.
- The aerial warfare doctrines and the capital questions of doctrine development.
- Evolution of aerial warfare and the air operations, the peculiarities operational planning in multinational and joint environment.

GIVES REASONS FOR THE DEVELOPMENT OF THE TOPIC AND HIS TIMELINESS, THAT:

- The airforce manoeuvre a work with an integrating character with a so scientific claim was Study with a scientific claim with a so integrating character cannot be found, that reveals the most important necessities of the aerial warfare and his trends from the beginnings of the aerial warfare to the Gulf Wars. Especially important nowadays the question of the aerial component of the war against the terrorism that integrating would be expedient likewise.
- From a Hungarian platform examined, the domestic needs and the respect of peculiarities may be more fruitful. This may serve the domestic doctrine development turning into the continuous one better, and the training system being founded on it.

DEDUCED FROM THIS THE AIMS OF OUR RESEARCH WORK:

- To sum up the airforce's theory of employment its principles and peculiarities.
- The exploration of the airforce's and the theory's of the aerial warfare developmental tendencies.
- The analysis of substantive changes ensued in the airforce's operation structure. The summary of researches is connected to the aerial operations of the future.

- To sum up from the content of the modern aerial operations for us the relevant phenomena.
- From among the general research methods we plan the observation, the induction and the critical adaption to apply.

#### THE SCHEDULE OF THE RESEARCH WORK:

2011. 02. – 2012. 02. (1st year)		2012. 02. – 2013. 02. (2nd year)		2013. 02. – 2014. 02. (3rd year)	
1 <sup>st</sup> month	The completion of a research plan	1-4. months	The evolution of the airforce's operation forms of application	1-4. months	The aerial warfare experiences of the Yugoslav crisis, and the changes of the airforce's operation structure based on the experiences of the Gulf Wars.
2-8. months	Carrying out of fundamental researches, the final synopsis	5-8. months	For the heroic age of the aerial warfare, and the theories of the period between the two world wars	5-8. months	The aerial component of the war against the terrorism
9-12. months	The fundamental questions of operational theory according to the airforce employment and operations	9-12. months	The aerial warfare experiences of a world war II. and the cold war, its theoretical bases	9-12. months	The summary of the research results, the study (book) pouring him into a final form

## 4. THE EXPECTED RESULTS OF THE RESEARCH WORK

We could write a stop-gap study with the processing of the applied topic, with the communication of the research results, according to our judgement. The results of the research could help in the additional doctrine development and researches.

## 5. NECESSARY INFRASTRUCTURE AND HUMAN RESEARCH BACKGROUND

The planned research is fundamentally planned into domestic searching workshops. Our researches are primarily based on secondary processing of books, studies, archival sources and databases. Knowledge obtained on study trips for foreign countries and conferences may complement the domestic work. The modern informatics devices, the internet and the analysis of the data of the international military science web-based databases may increase the efficiency of our researches.

The strength of the planned research, that the four big world languages and in one military culture (Russian, English, German, French) examines the topic, too.



## 6. THE PUBLICATION OF THE RESEARCH RESULTS

We publish the synthetize results continuously according to the planned research cycles the domestic one-, and according to an opportunity the foreigner, in a trade press. His products will be available to the single phases of the work for the vocational public opinion continuously on the internet.<sup>1</sup> The study put on for the specialists dealing with the airforce professionally onto the end of the project, and we would like to have a more popular publication published for the topic for interested people.

### i International literatures:

- Carpenter, Ronald H. : Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1941-1945 (review), Rhetoric & Public Affairs - Volume 10, Number 1, Spring 2007, pp. 164-167;
- Groehler, Olaf: A légi háborúk története 1910–1970, Zrínyi Katonai Kiadó, Budapest 1980.
- Olsen, John Andreas (ed.): A History of Air Warfare; Published by Potomac Books, Inc., Sterling VA 20166;
- Olsen, John Andreas: John Warden and the Renaissance of American Air Power Published by Potomac Books, Inc., Sterling VA 20166;
- Pape, Robert. A.: Bombing to Win: Air Power and Coercion in War. Cornell University Press, 1996. ISBN 0-8014-3134-4.;
- Biddle, Tami Davis: Rhetoric and reality in air warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945; Princeton University Press, 2002;
- Gooch, John: Airpower: Theory and Practice, London, Frank Cass, 1995. 276 pp.;
- Cox, Sebastian – Gray, Peter (ed.): Air Pwer History: Turning point from Kitty Hawk to Kosovo, London, Frank Cass, 2002;
- Newdick, Thomas (ed.): Air Warfare: From World War I to the Present Day, ISBN 13: 978-1-59223-825-5, Thunder Bay Press, 2008;
- The Paths of Heaven: The Evolution of Airpower Theory
- Meilinger, Phillip S. : Air University Press, 1997 , ISBN: 1-58566-027-2;

<sup>1</sup> We plan an own website in case of the gaining of the application to create, where the results of the research, and other relevant informations continuously, and they will be available promptly

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- Warden, John A. III (1988). The Air Campaign: Planning for Combat. Washington, D.C.: National Defense University Press. ISBN 9781583481004;
  - Warden, John: Enemy as a system, In: Air Power Journal, 1995 Spring, <http://www.airpower.maxwell.af.mil/airchronicles/apjindex.html>;
  - Warden, John A. III (September 1995). "Chapter 4: Air theory for the 21st century" (in Air and Space Power Journal). Battlefield of the Future: 21st Century Warfare Issues. United States Air Force. Retrieved december 26, 2008;
  - Mets, David R.: The Air Campaign: John Warden and the Classical Airpower Theorists. Alabama, 1999, Air University Press;

## **ii Domestic literatures:**

- A II. világháború magyar légoltalmának iratanyaga a Polgári Védelmi Archivumban, Szerkesztette: Kókay György, BM PVOP kiadása, 1996.
- Hadtörténeti Levéltár, HM, VKF anyagok, 1922–1945
- Magyar Katonai Közlemények (MKK) 1909–1930, Magyar Katonai Szemle (MKSZ) 1931–1944
- Dr. Barcy Zoltán: A magyar légvédelmi tűzérség fejlődése a Horthy korszakban, Haddtörténeti Levéltár, Tanulmánygyűjtemények
- Csanádi Róbert – Nagyváradai Sándor – Winkler László: A magyar repülés története, Műszaki Kiadó, Budapest 1977.
- M. Szabó Miklós: A magyar királyi honvéd légierő a második világháborúban, Zrínyi Kiadó, Budapest 1987.
- M. Szabó Miklós: A magyar királyi honvéd légierő elméleti – technikai – szervezeti fejlődése és háborús alkalmazása. 1938–1945, Zrínyi Katonai Kiadó, 1999.
- Nagyváradai Sándor – M. Szabó Miklós – Winkler László: Fejezetek a Magyar katonai repülés történetéből, Műszaki könyvkiadó, Budapest 1986.
- Pataky Iván – Rozsos László – Sárhidai Gyula: Légiháború Magyarország felett, Zrínyi kiadó, 1992.
- Dr. Szabó Miklós: A Magyar Királyi Honvéd Légierő technikai és szervezeti fejlődése (1938–1944). ZMNE Egyetemi Könyvtár, Kandidátusi értekezés, 1981.
- Vitéz Szentnémedy Ferenc írásai 1930 – 1939 között (MKK, MKSZ)
- Dr. Varga József: A légvédelmi tűzérség története a kezdetektől a második világháború végéig, Magyar Honvédség Légvédelmi Rakéta- és Tüzérfőnökség kiadványa, 1996.